

in view of Lindholm in further view of Nakagawa et al. (Nakagawa), U.S. Patent 5,832,911. These rejections are respectfully traversed.

Hogan teaches a means to characterize, evaluate, and reuse real-time embedded software that is placed or stored in a repository database (Col. 1, lines 9-11). A Repository Client accesses a Repository Server which, in turn, searches for Repository Units in the Repository database (Col. 9, lines 17-19). The appropriate Repository Units are “tagged” and a list of these units are routed to the user’s desktop. (Col. 9, lines 23-26). The user then selects certain Repository Units and the Repository Server downloads the Component to the user’s desktop. (Col. 9, lines 30-33). Hogan merely teaches the transmission and downloading of files from a server over a network. As the Examiner noted, Hogan does not teach where the Repository Units are denoted “downloadable units.” Moreover, Hogan does not teach or suggest the use of downloadable units having a bundle of components to allow a remote client to manage and configure a network device without having the necessary software.

Lindholm teaches a computer system and method for executing programs with reduced run-time memory space requirements. (Col. 1, lines 6-8). A user requests execution of a program on one of the server computer systems by issuing a command with the user interface to download and execute the program from the server computer system. In response, the operating system calls the network communications manager which generates a message indicating that such a request has been made. The network communications interface then transmits the

message to the server computer system and receives the reply with the requested programs. (Col. 6, lines 30-48). The network communications interface determines if there is enough space in the RAM available for loading the programs, and if not, a code compressor is used to compress codes in the RAM until enough space is available to load the program onto the RAM (Col. 6, lines 49-57, Col. 7, lines 36-44). Lindholm teaches a system and method to load programs in systems with limited RAM space. Lindholm does not teach or suggest the use of downloadable units having a bundle of components to allow a remote client to manage and configure a network device without having the necessary software.

The claimed invention provides more than a mere user interface to download files from the server to the client as taught in Hogan and Lindholm. As recited in claim 1, the present invention teaches the use of a downloadable unit having a bundle of components, embedded in the software program of the network device which is loaded onto the network device. The systems and methods defined in claims 13, 27, and 40-44 also include the same distinctive features as described above.

The legal conclusion of invalidity for obviousness depends on four factual inquiries: (1) the scope and content of the prior art; (2) the level of ordinary skill in the art; (3) the differences between the claimed invention and the prior art; and (4) secondary considerations of nonobviousness. Graham v. John Deere Co., 383 U.S. 1, 148 U.S.P.Q. 459 (1966).

Scope and Content of the Prior Art

“The test is not whether one device can be an appropriate substitute for another,” rather, an examiner “must make specific findings establishing why it was ‘apparent’ to use” the combination of the prior arts. Ruiz v. A.B. Chance Co., Fed. Cir., No. 99-1557 (December 2000). “The notion . . . that combined claims can be declared invalid merely upon finding similar elements in separate prior art patents would necessarily destroy virtually all patents and cannot be the law under the statute, §103.” Id.

The Office Action cites two different prior art patents: Hogan and Lindholm. Specifically, “it would have been obvious to one having ordinary skill in the art . . . to modify Hogan’s system with means for generating downloadable units, as thought by Lindholm by embedding downloadable units into a compiled binary file for transmitting to a remote client network device and loading the binary file with the embedded downloadable unit onto said network device, motivation would be to make [sic] the downloadable units independent of specific architecture or platform of the computer system, enabling these to be directly loaded in the run-time memory, where the receiving network is freed from handling the cycle of software purchase, installation, configuration and upgrade that is currently typical of software products.”

The office action does not state why it was “apparent” to use the combination of prior art patents to obtain the claimed invention and there is no motivation to combine the prior art referenced. Hogan teaches a means to

characterize, evaluate, and reuse real-time embedded software that is stored in a repository database whereas Lindholm teaches a computer system and method for executing programs with reduced run-time memory space requirements. The two prior art references are not related to each other or to the present invention – one teaches characterizing, evaluating, and reusing software stored in a database whereas the other teaches running programs with reduced run-time memory space. The present invention provides for the use of downloadable units having a bundle of components embedded in the software program of the network device which is loaded onto the network device. The bundle of components, as claimed, comprise “a communicator component for establishing a communication channel between the remote client and the software program, an interface component for enabling a client to communicate with the downloadable unit and a configuration component for managing and configuring the network device or software program.” The downloadable unit thus allows a remote client to manage and configure the network device without having the necessary supporting software. The Office Action tries to combine elements of the prior art patents to render the claimed invention obvious. Thus, there is no motivation to combine the prior art referenced to make the claimed invention obvious.

Differences Between Claimed Invention and Prior Art

As claimed, the present invention provides for downloadable units including “a communicator component for establishing a communication channel between the remote client and the software program, an interface component for enabling a client to communicate with the downloadable unit and a configuration

component for managing and configuring the network device or software program.” The claimed invention teaches an alternative system and method for manufacturing and using a network device capable of providing the needed management and configuration software to a remote user, rather than using a server. The present invention does not teach the use of a network communications interface or a Repository Server with a vast library of configuration and files and drivers. Rather, the claimed invention itself is manufactured with the appropriate binary control software installed with the device-specific downloadable units embedded therein. The downloadable units include a bundle of components to provide greater functionality, utility and comprehensive support of the network devices as compared to the network communications interface or the Repository Server of the prior art.

In contrast, Hogan does not teach where Repository Units are denoted as downloadable units. Moreover, Hogan discloses the use of a Repository Server which searches for Repository Units in a Repository database (Col. 9, lines 17-20). Lindholm teaches the use of a operating system calling a network communications interface to transmit a request to a server computer system, the server computer system providing the requested method which is communicated to the network communications interface for transmission to the user’s client computer system (Col. 6, lines 30-48). The prior arts do not teach the use of downloadable units having the bundle of components.

Furthermore, the present invention provides more than an interface application for downloading files from server to client. The present invention claims “compiling the software program into a binary file and embedding the

downloadable unit into the binary file.” The present invention teaches steps involved in compilation of the software and embedding of configuration files so that a network device can be manufactured with downloadable units pre-installed and available for download by a client – not merely the transmission and downloading of files from a server over a network to a client, as taught by the prior art. Neither Hogan nor Lindholm teaches or suggests the use of downloadable units embedded in the software to allow a remote client to manage and configure a network device without having the necessary supporting software.

It should be noted that even though Hogan’s system may be modified by Lindholm’s teachings, the resulting system does not realize the claimed invention. Such a modified system would involve transferring entire Repository Units embedded in binary files through a Repository Server or network communications manager. Thus, in the hypothetically modified system, a server is still utilized, the Repository Units would not comprise of the bundle of components as claimed in the present invention, and the Repository Units would not offer remote configuration and management capability from any node on the network. The combined teaching of the prior arts does not allow for the capability for a client to manage and configure a network device from a remote station.

Since the combination of Hogan and Lindholm does not result in the claimed invention, a further addition of Nakagawa to the alleged combination could not render the claimed invention unpatentable.

Dependent Claims

All other dependent claims depend from one of claims 1, 13, 27, 40-44 and thus include the limitations of the corresponding independent claim. The argument set forth above is equally applicable here. The base claims being allowable, the dependent claims must also be allowable.

In view of the foregoing, it is respectfully asserted that the claims are now in condition for allowance.


Request for Allowance

It is believed that this Response places the above-identified patent application into condition for allowance. Early favorable consideration of this application is earnestly solicited.

If, in the opinion of the Examiner, an interview would expedite the prosecution of this application, the Examiner is invited to call the undersigned attorney at the number indicated below.

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Respectfully submitted,
THELEN REID & PRIEST, LLP


Adrienne Yeung
Reg. No. 44,000

THELEN REID & PRIEST LLP
P. O. Box 640640
San Jose, CA 95164-0640
Tel: (408) 292-5800